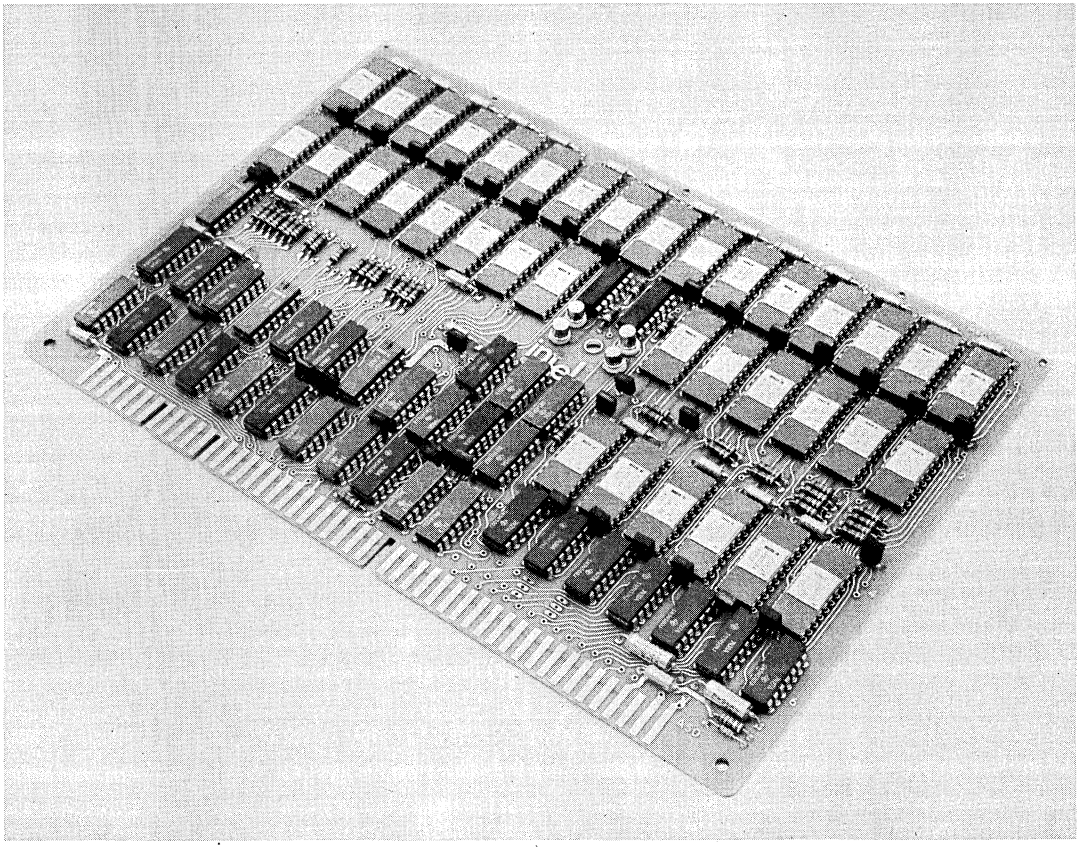
NEW

# in-41E MEMORY SYSTEM
## (Euroboard Format)



### in-41E SERIES RAM MEMORY FEATURES:

- Low Cost Memory
- High Reliability
- Module Expandability
- Module Interchangeability
- Automatic Refresh
- Fast Cycle Time
- Low Power Requirements
- Compact Size
- Field Expandable
- Master/Slave Operation
- Complete Control on each Board
- Address and Data Registers

The in-41E RAM Memory System is perhaps the highest density memory now available on Euroboards. The interchangeable memory boards (MU) allow expansion in increments of 8K x 18 or 16K x 9 with no adjustments. A single control board (CU) handles up to 64K x 18 or 128K x 9 comprising our lowest cost-per-bit package available. This memory system features a fast access and cycle time, high density and the use of a 4K RAM as the storage device.

## SYSTEM in-41E SPECIFICATIONS

**Dimensions:**

| | | |
|---|---|---|
| Memory Board: | 160 mm | High |
| (8K x 18) | 233.4 mm | Deep |
| | 12.7 mm | Wide |

To expand to 64K x 18, add 12.7 mm per memory card.

**Capacity:**

8,192 words expandable in cards to 65, 536 x 18 storage capacity or 128K x 9.

**Word Length:**

Up to 18 bits in a single memory card. Longer word length can be accommodated by combining memory cards.

**Cycle Time:**

| | |
|---|---|
| in-41E | 550 Nanoseconds |
| in-41E-1 | 650 Nanoseconds |

**Access Time:**

| | |
|---|---|
| in-41E | 350 Nanoseconds |
| in-41E-1 | 475 Nanoseconds |

**Operational Modes:**

Read (NDRO)
Write

**Interface Characteristics:**

TTL Compatible
Standard Input Lines:
- Cycle Initiate
- Byte Control
- Read/Write

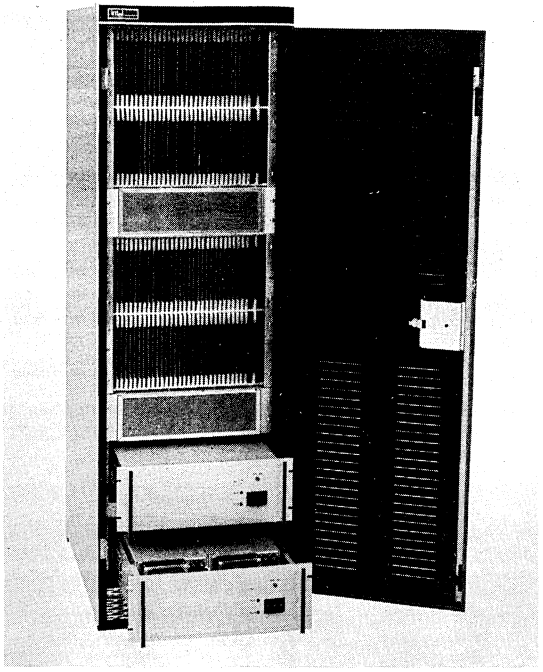
Standard Output Lines:
- Data Available
- Memory Busy

**Address Input:**

12 - 17 lines, binary, single ended.

**Environment:**

| | |
|---|---|
| Temperature: | 0°C to +50°C operating ambient<br>-40°C to +125°C non-operating |
| Relative Humidity: | Up to 90% with no condensation |
| Altitude: | 0 to 10,000 feet operating<br>Up to 15,000 feet non-operating |



**D.C. Power Requirements:**

MU-41E: Selected

| Voltage | Current (Typical) | Regulation |
|---|---|---|
| +12V | 1.4 Amps | ±5% |
| +5V | 1.0 Amps | ±5% |
| -5V | 50 Milliamps | ±5% |

MU-41E: Unselected

| Voltage | Current (Typical) | Regulation |
|---|---|---|
| +12V | 0.142 Amps | ±5% |
| +5V | 1.0 Amps | ±5% |
| -5V | 50 Milliamps | ±5% |

CU-41E:

| Voltage | Current (Typical) | Regulation |
|---|---|---|
| +5V | 1.3 Amps | ±5% |

**Features:**

| | |
|---|---|
| Module Select | Basic system |
| Data Register (optional) | available as |
| Address Register | 8K x 18 or |
| Fast Cycle Time | 16K x 9. |
| Byte Control (2 zones max) | |

**Special Option:**

Intel also offers the in-41E mounted in a card chassis either as a single or multiple card system.